Exhibit E

BRICO Industries Inc.
A Victaulic® Company

P.O. Box 48776 Atlanta, GA 30362
(770) 840-0662 • (800) 841-6624 • Fax (770) 840-8312

March 31, 2000

Spiniello Companies
35 Airport Road
PO Box 1968
Morristown, NJ 07962-1968

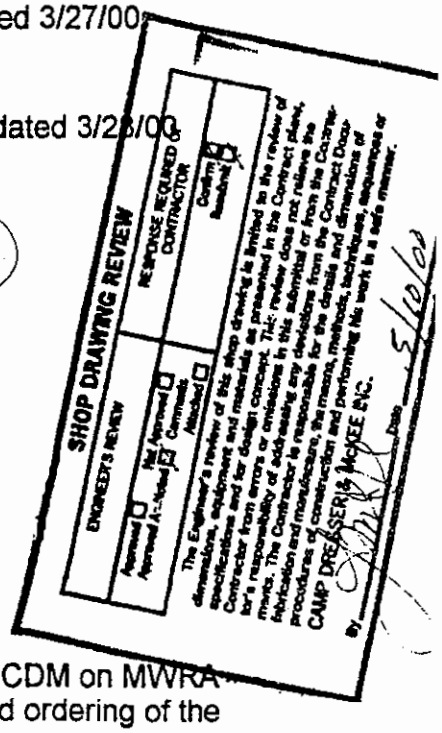
Attn.: Mr. Robert Block

SPINIELLO COMPANIES
APPROVED FOR CONTRACT REQUIREMENTS
SIGNATURE
DATE 5/3/00 SUBMITTAL NO. 84
SPEC. SECT. 2776 PARA. NO. 1.05
THE CONTRACTOR'S SIGNATURE INDICATES CERTIFICATION THAT HE HAS CHECKED THE SUBMISSION WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS AND FOUND IT TO MEET ALL REQUIREMENTS OF SAME INCLUDING DIMENSIONS.

Re: Brico Industries' InnerSeal II Submittal Information
WASM 1 & 2, MWRA Contract #6280

Enclosed please find the following technical submittal information regarding the Brico Industries, Inc. InnerSeal II that is required by the above referenced project in specification section 02776.

1. Engineering Detail Drawing titled "D-O-L InnerSeal II" dated 3/27/00 (One sheet)
2. Design Calculations titled "InnerSeal II Band Stiffness" dated 3/27/00 (Three sheets)
3. Computer Calculations titled "InnerSeal II Band Stiffness" dated 3/28/00 (One sheet)
4. InnerSeal II Testing Requirements dated March 30, 2000 (One sheet)
5. Depend-O-Lok InnerSeal catalog cut (Four pages)
6. Depend-O-Lok InnerSeal II "Installation Procedures" (One sheet)
7. Phoenix 506 Pipe Joint Lubricant "Technical Data Sheet" (One sheet)



This submittal is similar to the submittal that was approved by CDM on MWRA Contract # 6312. After receiving approval on this submittal and ordering of the

materials, Brico will prepare and submit the NSF certifications on the actual materials that will be utilized in the manufacture of the InnerSeal II.

Please feel free to contact me at (800) 841-6624 if you have any questions on this submittal or require additional information.

Sincerely,

Bob Card

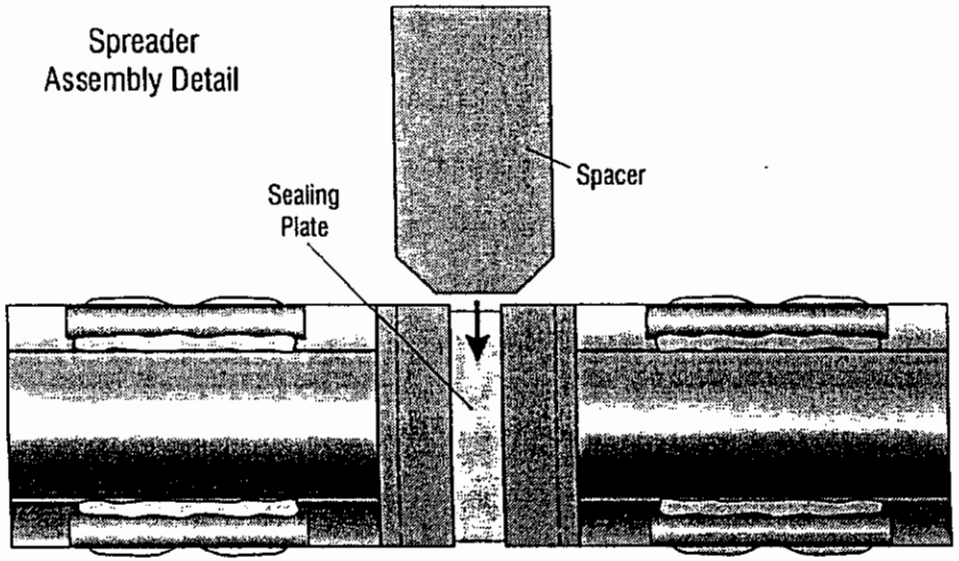
Bob Card, P.E.
Vice President Engineering

CC: Mr. Bill Haines, Haines Enterprises
Mr. Paul Angert, Products 2000, Inc.

file: rjc0331.doc

CONTRACTOR SHALL SUBMIT RECORD OF EXPERIENCE FOR THE PROPOSED "INSTALLATION CONTRACTOR'S FOREMAN" IN ACCORDANCE WITH 02776, PARA 1.05.A.1.

Spreader Assembly Detail



Top View of InnerSeal II Band at Spreader Assembly

Side View of InnerSeal II Band at Spreader Assembly

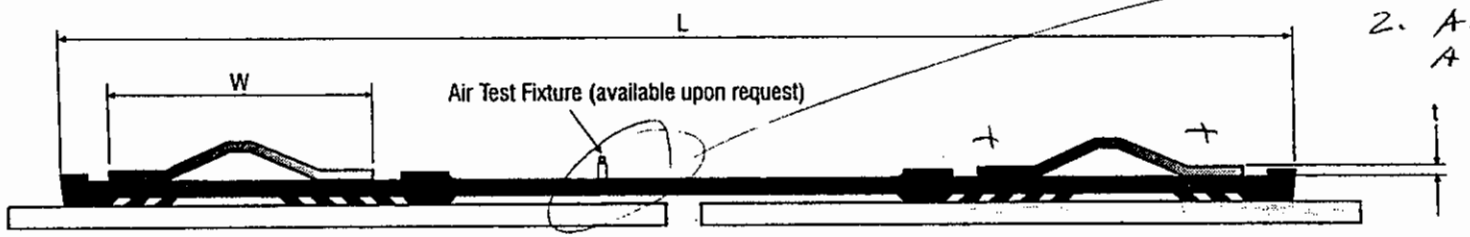
DESIGN CRITERIA	
NOMINAL PIPE SIZE	48" & 60"
TYPE OF PIPE	Cast Iron
PIPE I.D. *1	—
INNERSEAL SLEEVE WIDTH (L)	11.75"
INNERSEAL BAND WIDTH (W)	2.6"
INNERSEAL SLEEVE THICKNESS (t)	0.105"
DESIGN PRESSURE	200 PSI
NUMBER OF BAND SEGMENTS	1
NUMBER OF BANDS	2
MATERIALS	
INNERSEAL BANDS	T-304 S.S.
INNERSEAL SEALING PLATE	T-316L S.S.
INNERSEAL SLEEVE *2, 3	BUNA-N
INNERSEAL HARDWARE	T-304 S.S.

1). Contractor to confirm actual inside diameters of pipes prior to fabrication.

2). Conforms to the requirements of NSF 61.
a). Reference specification sections 02776-2.02 A. 1. & 2.

3). NSF certification submittal to follow once material is received.
Submittal to be prior to delivery of seals to jobsite.

1. INDICATE SEAL TEST VALVE DETAIL.
2. ALL SEALS SHALL HAVE A SEAL TEST VALVE.



Sleeve cross-section shown with steel bands in place before being spead open against sleeve.

NO.	DATE	REVISION

BRICO Industries Inc.
A Victaulic® Company
P. O. Box 48776
Atlanta, GA 30362
(770)840-0662

D-O-L INNERSEAL II

PROJECT		CONTRACTOR
WASM No. 1 & 2 MWRA Contract #6280		Spiniello Companies Morristown, N.J.

DRAWN	REP	APPRVD
C.B.	B.C.	

FILE: MWRA000327-01.cdr

DATE	SCALE	DRAWING NO.

BRICO Industries Inc.
P.O. Box 48776 Atlanta, GA 30362
(770) 840-0662 • (800) 841-6624 • Fax (770) 840-8312

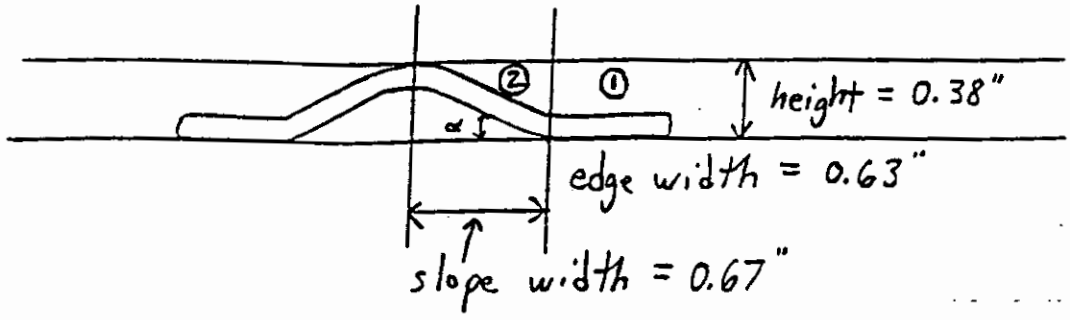
Re: Inner Seal II Band Stiffness sht 1/3 Date: 3/27/00 By: RC
WASM 1&2 – MWRA Contract # 6280

(Ref. Section 02776-2.02A.3.)

1. Find I of specified 3/16" x 2" band

$$I = \frac{bh^3}{12} = \frac{2(0.1875)^3}{12} = 0.0011 \text{ in.}^4$$

2. Find I of Inner Seal II band, 0.105" (12 ga.) x 2.60"



Area ① is a rectangle $\therefore A_1 = 0.105 \times 0.63 = 0.0662 \text{ in.}^2$

Area ② is a rectangle $\therefore \alpha = \text{Tan}^{-1}\left(\frac{0.3275}{0.67}\right) = 26°$

$\therefore A_2 = 0.105 \times \frac{0.67}{\text{Cos}\,26°} = 0.0783 \text{ in.}^2$

$Y_1 = 0.105/2 = 0.0525"$

$Y_2 = \frac{0.275}{2} + \frac{0.105}{2}\,\text{Cos}\,26° = 0.1847"$

BRICO Industries Inc.
P.O. Box 48776 Atlanta, GA 30362
(770) 840-0662 • (800) 841-6624 • Fax (770) 840-8312

Re: InnerSeal II Band Stiffness sht. 2/3 Date: 3/27/00 By: RC
WASM 1 & 2 – MWRA Contract # 6280

$$\bar{y} = \frac{2A_1y_1 + 2A_2y_2}{2A_1 + 2A_2}$$

$$= \frac{2(0.0662)(0.0525) + 2(0.0783)(0.1847)}{2(0.0662) + 2(0.0783)}$$

$$\bar{y} = 0.1241"$$

Moment of Inertia

Section ① $I_1 = \frac{bd^3}{12} + A_1(y_1 - \bar{y})^2$

$$I_1 = \frac{0.63(0.105)^3}{12} + 0.0662(0.0525 - 0.1241)^2$$

$$I_1 = 0.0004 \text{ in}^4$$

Section ② $I_{x-x} = \frac{0.67(0.105)^3}{12} = 0.0001 \text{ in.}^4$

$$I_{y-y} = \frac{0.105(0.67)^3}{12} = 0.0026 \text{ in.}^4$$

$$I_{x'-x'} = I_{x-x}\cos^2\alpha + I_{y-y}\sin^2\alpha$$

$$= 0.0001\cos^2 26° + 0.0026\sin^2 26°$$

$$I_{x'-x'} = 0.0006 \text{ in.}^4$$

BRICO Industries Inc.
P.O. Box 48776 Atlanta, GA 30362
(770) 840-0662 • (800) 841-6624 • Fax (770) 840-8312

Re: InnerSeal II Band Stiffness sht. 3/3 Date: 3/27/00 By: RC
WASM1&2 —MWRA Contract # 6280

$$I_2 = I_{x'-x'} + A_2 (y_2 - \bar{y})^2$$

$$= 0.0006 + 0.0783 (0.1847 - 0.1241)^2$$

$$I_2 = 0.0008 \text{ in.}^4$$

$$\text{Total } I = 2I_1 + 2I_2$$

$$I = 2(0.0004) + 2(0.0008) = 0.0025 \text{ in.}^4$$

$0.0025 > 0.0011$ ∴ band design is satisfactory

See computer output for verification

BRICO Industries Inc.
P.O. Box 48776 Atlanta, GA 30362
(770) 840-0662 • (800) 841-6624 • Fax (770) 840-8312

WASM 1 & 2 - MWRA CONTRACT #6280
INNERSEAL II BAND STIFFNESS CALCULATION
(REF. SECTION 02776 - 2.02A.3.)
3/28/00

48 OR 60 IN. INNERSEAL II BAND DESIGN	
BAND THICKNESS: T	0.105 IN.
BAND WIDTH: BW	2.600 IN.
EDGE WIDTH: EW	0.630 IN.
SLOPE WIDTH: SW	0.670 IN.
SLOPE HEIGHT: H	0.380 IN.

SPECIFIED DESIGN
H = 0.188 IN.
B = 2.000 IN.
I = BH^3/12
I = 2 (0.188)^3/12
I = 0.0011 IN.^4

AREA 1 - A1

$A1 = T(EW) = 0.0662$ IN.^2

AREA 2 - A2

$ANGLE = ARCTAN((H-T/2)/SW) = 26.0$ DEG.

$A2 = T(SW)/COS(ANGLE) = 0.0783$ IN.^2

$Y1 = T/2 = 0.0525$ IN.

$Y2 = (H-T)/2 + T/2(COS(ANGLE)) = 0.1847$ IN.

$$Y = \frac{(2)\,A1\,Y1 + (2)\,A2\,Y2}{(2)\,A1 + (2)\,A2} = 0.1241 \text{ IN.}$$

MOMENT OF INERTIA

SECTION 1 - I1 $= EW(T)^3/12 + A1(Y1-Y)^2 = 0.0004$ IN.^4

SECTION 2 - I2

$Ix\text{-}x = SW(T)^3/12 = 0.0001$ IN.^4

$Iy\text{-}y = T(SW)^3/12 = 0.0026$ IN.^4

$Ix'\text{-}x' = Ix\text{-}x(COS^2(ANGLE)) + Iy\text{-}y(SIN^2(ANGLE))$
$= 0.0006$ IN.^4

$I2 = Ix'\text{-}x' + A2(Y2-Y)^2 = 0.0008$ IN.^4

$TOTAL\ I = (2)\,I1 + (2)\,I2 = 0.0025$ IN.^4

0.0025 is 2.27 TIMES SPECIFIED STIFFNESS

FILE: ININBAND9.WB3

BRICO Industries Inc.
A Victaulic® Company

P.O. Box 48776 Atlanta, GA 30362
(770) 840-0662 • (800) 841-6624 • Fax (770) 840-8312

DATE: March 30, 2000

SUBJECT: WASM 1 & 2 - MWRA Contract #6280,
InnerSeal II Testing Requirements

REQUIREMENT: Specification Section 02776 - 3.05 B. - D.

The following is offered in lieu of the above referenced specified sections.

PROPOSAL: Proof-of-Design, Lot & Field Testing

1. Proof-of-Design Testing. Manufacturer to prove the design by testing one seal of each diameter in the shop prior to the production run. A steel test mandrel with a diameter equal to the pipe I.D. (to be sealed in the field) shall be utilized for this test. Five (5) psi air pressure shall be introduced through a test valve in the seal. The pressure shall be sustained while soap and water is applied to the outer edge of the seal between the seal and the pipe wall. There shall be no evidence of leaks.

2. Lot Testing. One seal in each lot of ten (10) seals for the first one hundred (100) of each size shall be tested in the manufacturers shop as described in number 1 above. After the first one hundred (100) seals of each size have been produced, the lot size will be increased to fifty (50).

3. Field Testing. The contractor shall test the installed seals at the same rate as the manufacturer's lot testing as described in number 2 above. Five (5) psi air pressure shall be introduced through the test valve in the seal. There shall be no evidence of leaks between the seal and the pipe.

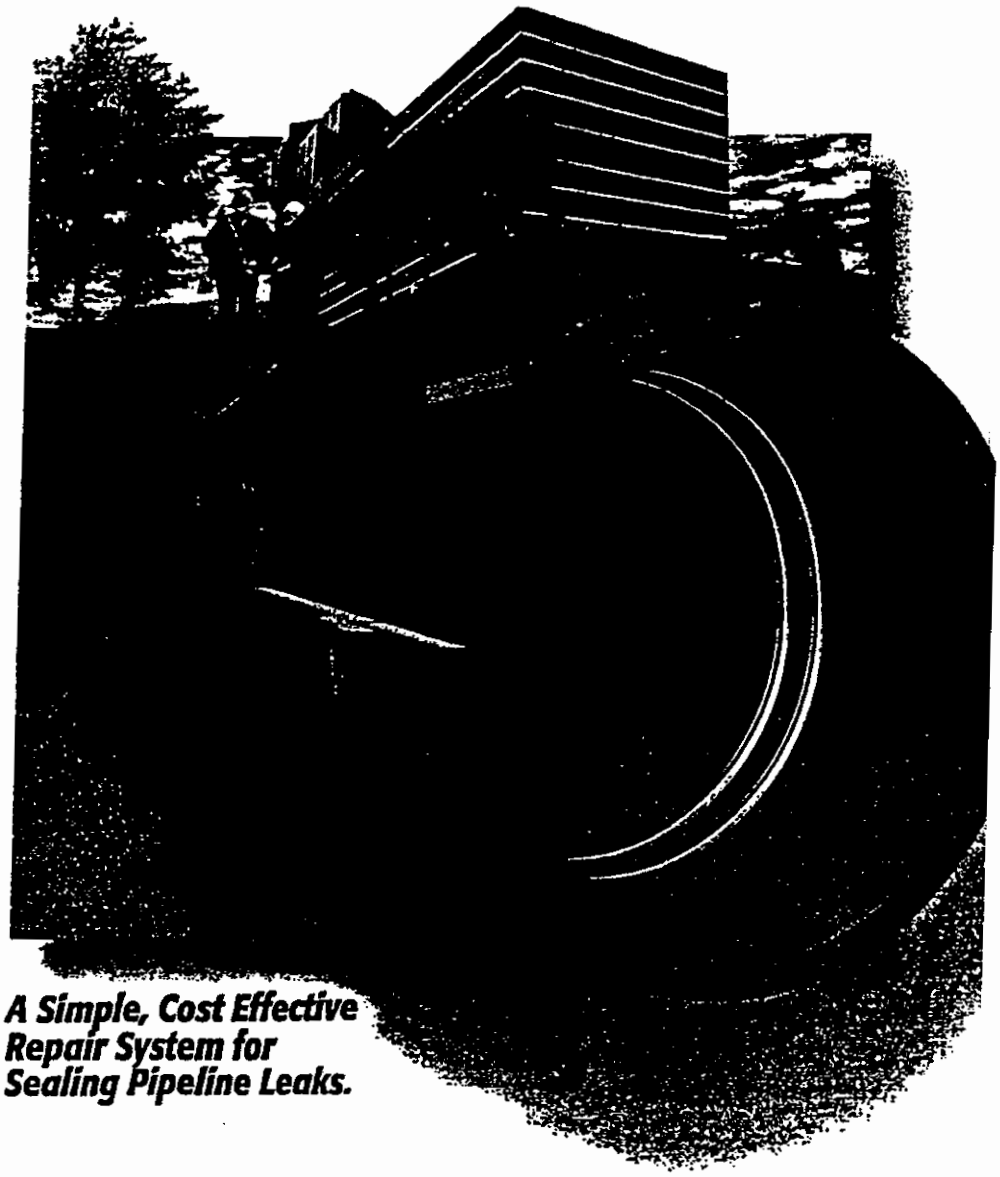
Note: If the contractor-installed seal is not holding pressure and there is no evidence of the seal leaking, it is assumed that the pipe joint is deteriorated to the point of leaking.

FIELD TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH PARA. 3.05.B-D

file: rjc0330a.doc

BRICO Industries Inc.

DEPEND-O-LOK®
InnerSeal



A Simple, Cost Effective Repair System for Sealing Pipeline Leaks.

BRICO Industries Inc.

InnerSeal internal repair sleeves

Depend-O-Lok InnerSeal offers optimum quality with immediate and lasting benefits.

Insist on InnerSeal to solve your pipe joint repair problems. It's the strong, permanent, reliable, cost effective pipeline repair solution.

Repairing leaking pipelines in buried service has long been a complex, time consuming, and expensive process. You want high quality and cost effective solutions. With Depend-O-Lok's InnerSeal and InnerFlex units, you get that ...and more.

First, the Depend-O-Lok InnerSeal Repair system gives you the assurance of a strong and lasting repair. Which means renewed and extended life for your pipelines.

Secondly, with InnerSeal you can **use your own labor force** to make repairs quickly, easily, and at lower cost. No more costly excavations. This results in savings of 75% or more over conventional repair methods and 35% over other internal seals. Workers, with easy access to the pipeline through manholes, can fix the leak and immediately test the repair to ensure it's bottle-tight.

Typical InnerSeal applications include repairing pipes that have:

- **Leaking joints caused by pipe deflection**
- **Joints leaking due to pipe offset**
- **Leaks caused by corrosion**
- **Cracks or holes.**
- **Joint leaks due to out-of-round pipe.**
- **Leaded joints, to isolate the lead from potable water.**

InnerSeal has the desirable low profile that assures maximum flow through the pipeline. The units are designed for pipes from 18" to 144" diameter with internal working pressures up to 300 psi. Brico has furnished specially designed InnerSeals for internal pressure of 500 psi and diameters in excess of 216". They may be manufactured for transition joints and are available in multiple segments, for ease of handling in confined spaces.

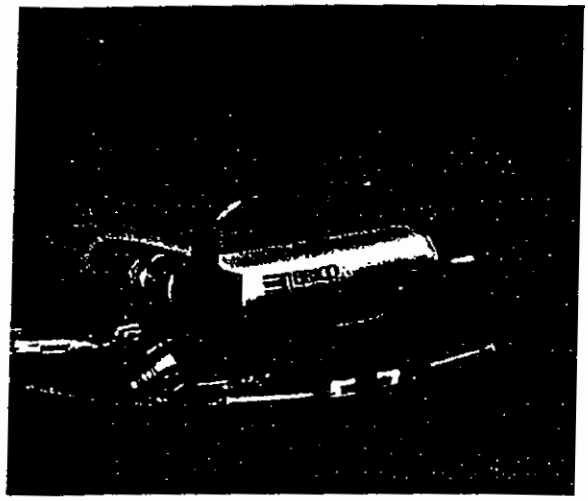
InnerSeal Features & Benefits

Boltless Spreader Assembly *simplifies installation. They enable the bands to squeeze the rubber sleeve against the pipe wall effecting a bottle tight seal, permitting high operating pressure.*

Low Profile *minimizes flow interruption.*

Arched Design *provides high section modulus, with high strength-to-weight ratio.*

Flexibility *provides effective sealing in out-of-round pipes*



Multiple Segments *make pipeline access and repairs in full range of pipe sizes easier.*

Sealing Sleeve *proven design ensures leakproof seal on joints, even when pipe end diameters vary significantly or are in a deflected state..*

Test Fixture *permits air testing of completed seal, and air or hydro testing of existing pipe joints to find leaks.*

Materials of manufacture *have long history of proven performance, including NSF 61 certification. Increased corrosion resistance to ensure longer pipeline life.*

InnerSeal is engineered to match your needs

Standard InnerSeal units are designed to meet typical pipeline repair situations. Sometimes pipe joint distortion, misalignment, instability and other unusual conditions require specially designed sealing units. Brico Industries recognizes this and, in addition to its standard units, offers you the benefit of custom designed InnerSeals to meet unique needs. Please contact us for design assistance whenever you have special requirements.

The Depend-O-Lok InnerSeal units are manufactured from either carbon or stainless steel and are available in three styles.

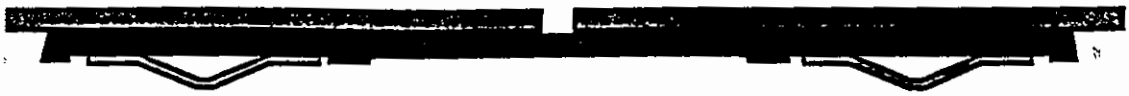
InnerSeal offers Contractor Assurance

Contractors installing large diameter pipe with rubber gaskets or welded joints, and who won't test the pipe hydrostatically for some time, can benefit from using the InnerSeal unit as a test device.

After pipeline assembly, each joint may be air tested using the InnerSeal test fixture. With successful testing, the ditch can be backfilled with confidence that the joints are bottle-tight.

InnerSeal, Type I utilizes a solid style band. This unit offers the greatest strength and joint protection. Pipe joints may be pressure tested to up to 50 psi. It is available in 7" to 24" widths.

Type I units allow for some axial pipe movement and should be installed where pipelines joints are most closely aligned. It is not recommended for repairing joints that are offset or deflected.



InnerSeal, Type II uses arched bands. These units are designed for installation where joint deflection and offset may exist and where spanning wider areas of damaged pipe is desired. The standard width for this unit is 12" and is available in 12" increments up to 48" wide. The standard installation test pressure is 5 psi.

The narrower, lighter bands of the InnerSeal II are easy to handle, making it the ideal choice for pipeline rehabilitation or for repairing leaks at difficult to reach pipeline locations. Type II are the easiest to install, resulting in the most economical solution to your joint problems.

InnerFlex features heavier arched bands than that of the InnerSeal II unit, paired with a unique flexible sleeve. The InnerFlex is the ideal solution for joints in a dynamic state where additional joint deflection, offset and expansion may occur. InnerFlex standard width is 18" and is available in widths up to 48". Standard installation test pressure for these units is 7 psi.

BRICO Industries Inc.

Rubber Material Selection

Engineers

Brico Industries, Inc. will gladly submit detailed drawings, for engineering approval, that will accurately detail each design application. Drawings will show all dimensions and incorporate the latest manufacturing and design information.

InnerSeal gaskets and sleeves can be furnished to comply with NSF 61 requirements for potable water.

ISOPRENE: Temperature range: -80° to +165° F.
Excellent resistance to water, salt water and sewage. Good resistance to oxygen and dilute acids.

BUNA-N: Temperature range: -40° to +220° F.
Excellent resistance to petroleum oils, and gasoline. Good resistance to hydrocarbons, acids and bases.

NEOPRENE: Temperature range: -40° to +230° F.
Good resistance to ozone, sunlight and oils.

Brico Industries, Inc.
P.O. Box 48776, Atlanta, GA 30362
(770) 840-0662 • (800) 841-6624 • Fax# (770) 840-8312
Web: http://www.brico-dol.com

BRICO Industries Inc.

DEPEND-O-LOK

InnerSeal II
Installation Procedures

Items provided with InnerSeal:
- InnerSeal Sleeve
- 2 InnerSeal Bands
- Spacers
- Lubricant

Tools Required to Install:
- D-O-L Hydraulic Spreader Tool*

* Available from Brico Industries, Inc. for a refundable deposit.

1. The pipe in the area of the joint to be sealed should be clean, smooth and free of debris. It does not need to be completely dry.

2. Lubricate the area of the pipe that the InnerSeal Sleeve will contact. Fold each end of the InnerSeal Sleeve towards the middle in a tri-fold manner. Center the sleeve over the joint and unfold. Press the sleeve against the pipe starting from the bottom, working up both sides of the pipe to the top. There will be a slight bulge in the sleeve at the top, push hard against the bulging section until it comes into contact with the pipe. Once the sleeve is installed it will hold itself onto the pipe.

3. Lubricate the two channels of the InnerSeal Sleeve where the bands will be located.

4. Place one of the bands onto the InnerSeal Sleeve.

5. With the band in position, rotate the Spreader Plates to the desired location. Locating the plates at the 6 o'clock position is the easiest for installation. It may, however, be useful to locate the Plates at the side of the pipe if there is a concern for debris accumulation.

6. Align the band so that it is perpendicular to the axis of the pipe. If pipe deflection occurs at the joint, align each band so that it is perpendicular to the axis of it's respective pipe.

7. Position the Hydraulic Spreader Tool so that it engages the Spreader Lugs. Hold the Spreader Tool in position until there is sufficient pressure to keep it in place. Continue opening the Spreader Plates until the pressure gauge reads 3000 psi. Let the rubber relax for 30 seconds and pump the gauge back to 3000 psi. Insert a Spacer. It may be necessary to tap the spacer in with a hammer.

8. Release pressure and remove the Hydraulic Spreader Tool.

9. Repeat steps #4 through #8 for the second band. The installation is complete when the bands are pressing tightly around the entire circumference of the InnerSeal Sleeve.

To air test (if optional air test sleeve was selected) - put approximately 5 - 6 p.s.i. into the air test fixture. With a spray bottle of soapy water spray the edges of the sleeve to check for air leaks.

If you have any questions that are not covered by these instructions, please call us at ***(800) 841-6624****. We will be happy to help.*

PHOENIX 506 PIPE JOINT LUBRICANT No. 7323 - 7331

TECHNICAL DATA SHEET

DESCRIPTION

A WATER-DISPERSIBLE, SOFT, PASTE-LIKE COMPOUND MADE FROM A POTASSIUM SOAP OF VEGETABLE OILS.

RECOMMENDED USES

SUITABLE FOR ALL TYPES OF PIPELINES, ESPECIALLY PLASTIC, INCLUDING POTABLE WATER PIPELINES.

FEATURES

* WILL NOT IMPART TASTE OR ODOR IN PIPELINES FLUSHED IN ACCORDANCE WITH RECOMMENDED AWWA PROCEDURES.
* CONTAINS NO PETROLEUM.
* WILL NOT DETERIORATE NATURAL OR SYNTHETIC RUBBER, PLASTIC GASKETS OR CAST IRON PIPE.
* CONSISTENCY STABLE FROM 35° TO 100° F.
* WILL NOT SUPPORT BACTERIA.
* NO OBJECTIONABLE ODOR.

PRODUCT DATA

FORM: PASTE	COLOR: AMBER
BOILING POINT: >220° F	ODOR: BLAND
FLASH POINT: >250° F	PETROLEUM DISTILLATES: NONE
TOXICITY: NONE	PHOSPHATES: NONE
SOLUBILITY IN WATER: COMPLETE	LOW TEMPERATURE APPLICATION: NOT RECOMMENDED FOR <35° F

PACKAGING

AVAILABLE IN: 1, 8, 25 & 40 POUNDS.

JTM PRODUCTS, INC.
9505 Cassius Avenue • Cleveland, Ohio 44105
216/341-2212 • 800/229-6744 • 216/341-2214

Exhibit F

FILE

BRICO Industries
2681 Pleasantdale Road
Doraville, Georgia 30340

BRICO #: 7510

Sold TO: SPINIELLO COMPANIES P.O. # : 51566

SHIP TO:
SPINIELLO - BOSTON
COMMONWEALTH AVE & ROBINHOOD
AUBURNDALE, MA 02466

SHIPPED: 7-20-00 BO
Ship By: 05/24/2000

Ship Via: OVERNITE TRANSPORTATION CO.

Item	Shipped	B/O	Item Description
3	74		60" INNER-SEAL II, T-304L 12ga. x 2.5"W, w/T-304L BANDS 1 SEGMENT, BUNA-N SLEEVE (IS-060000-3712-0263-0109-1-Z)
			148-) InnerSeal Band (X-INS BAND 1)
			74-) InnerSeal II Sleeve (X-INS SLV-I2)
4	5		60" INNER-SEAL II, T-304L 12ga. x 2.5"W, w/T-304L BANDS 1 SEGMENT, BUNA-N SLEEVE 0.25" THK. BUNA-N TRANS. BAND (IS-060000-3712-0263-0109-1-Z)
			10-) InnerSeal Band (X-INS BAND 1)
			5-) InnerSeal II Sleeve (X-INS SLV-I2)
			5-) TRANSITION BAND (X-TRANS BAND)
5	370		T-304L SPACERS f/INNER-SEAL II (IS-SPCR-0188-2000-3000)
			370-) SPACERS (X-SPACERS)
6	2		D-O-L HYD SPREADER TOOLS -NEW ********** Return required upon final installation. (STH-7100-1004-0600-0100-5)
			2-) HYD SPRDR TOOL-2.5W INRSEAL BANDSTR-7100)
			2-) 10-TON / 4" STROKE HYD CYL (HC-1004)
			2-) 6' LONG HYD HOSE (HH-600)
			2-) ENERPAC HYD HAND PUMP P39 (HP-100)
			2-) HYDRAULIC GAUGE, 5000 psi (HG-5K)

7-21-00 RED

- - - - - P A C K I N G L I S T - - - - -

Lubricant: 3 Bags / Pails. End Rings: _____ on _____

Special Instructions:
MWRA Contract #6280, 60" WASM 2
Hole #2 (Sta. 66+87) toward Hole #3 (Sta. 76+52)
Job #ES-CL-4259

This Shipping Order in Carbon, and retained by the Agent.

Shipper No. B 5158

TRANS Group
(Name of Carrier)

Carrier No.

Date 7-20-00

TO: Consignee SPINELLO - Boston	FROM: Shipper BRICO INDUSTRIES, INC. A VICTAULIC® CO.
Street COMMONWEALTH AVE & ROBIN HOOD	Street 2681 Pleasantdale Rd. 800-841-6624
Destination AUBURNDALE, MA 02466	Origin Doraville, Georgia 30340
Route	Emergency Response Phone No. / Vehicle Number

No. Shipping Units	HM*	Kind of Packaging, Description of Articles, Special Marks and Exceptions	Weight (subject to correction)	Rate	CHARGES
3 SKID'S		DEPEND-O-LOK ~~COUPLINGS~~ INNER-SEALS	6262 #		
		(Deliver Before Noon ON 7-22-00)			
		(Contact: Steve Pollen)			
		(617-559-7055 office)			
		(508-523-1795 Cell) "PREPAID"			
		FREIGHT CLASS 50 NMFC-51460			

When transporting hazardous materials include the technical or chemical name for n.o.s. (not otherwise specified) or generic description of material with appropriate UN or NA number as defined in US DOT Emergency Communication Standard (HM-126C). Provide emergency response phone number in case of incident or accident in box above.

REMIT C.O.D. TO: ADDRESS:	COD Amt: $	C.O.D. FEE: PREPAID ☐ COLLECT ☐ $
NOTE – Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ _____ per _____	This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. _____ Signature	Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges. _____ (Signature of Consignor)
		TOTAL CHARGES: $
		FREIGHT CHARGES: FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

*RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the Bill of Lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the Bill of Lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

NOTICE: Freight moving under this Bill of Lading is subject to the classifications and lawfully filed tariffs in effect on the date of this Bill of Lading. This notice supersedes and negates any claimed, alleged or asserted oral or written contract, promise, representation or understanding between the parties with respect to this freight, except to the extent of any written contract which establishes lawful contract carriage and is signed by authorized representatives of both parties to the contract.

SHIPPER BRICO INDUSTRIES, INC. A VICTAULIC® COMPANY	CARRIER T Peters
PER	PER
	DATE 7-20-2000

2

*HAZARDOUS MATERIALS – MARK WITH "X" TO DESIGNATE HAZARDOUS MATERIALS AS REFERENCED IN 49CFR § 172.202.

Agent must detach and retain this Shipping Order and must sign the Original Bill of Lading.

WATKINS MOTOR LINES, INC. (WWAT)
P.O. Box 95002 Lakeland, Florida 33804-5002
(800) 274-9099

ATL-455330

* W W A T *

ATL-455330

DATE	DEST	CP	TH	BI	C/L PAYABLE	WML REV.	NON-REC.	TRAILER	EXC CODE		COD
08/09/00	[illegible]	P	1	1				12078	ACB		

CONSIGNEE
SPINIELLO-BOSTON
COMMONWEALTH AVE & ROBINHOOD
AUBURNDALE MA 02466

SHIPPER
~~BRICO INDUSTRIES INC~~
2681 PLEASANTDALE ROAD
ATLANTA GA 30362

DEL STOP #

Phone
Appt. date
Appt. time
Contact
Comments

*** APPOINTMENT CONFIRMATION ***

HNDL-UNIT	SHIPPER NUMBER	C/L PRO NUMBER	C/L DATE	ORIG C/L	DEST C/L
6	B5176		08/09/00		

PIECES	H.M.	DESCRIPTION AND MARKS	KEYWORD CODE	WEIGHT / LBS.	RATE	CHARGES
		BRICO INDUSTRIES	BILL TO			
		P O BOX 48776				
		DORAVILLE GA 30362				
6		SKID INNER-SEALS NMFC 51460	N051460-00	11065		
		FUEL SURCHARGE	FSC			
		100% GUARANTEED QUALITY SERVICE	GQS			
6		TTL	PPD	11065		
		MANA 00.217 22.47				
		NWAT 615 18446.0000 DP				
		*NWAT 000500 00480 W500				
		EDB RATED 080400 22.47 10 BBE				TO BE PREPAID

Construction Site Delivery

RECEIVED ABOVE PROPERTY IN GOOD CONDITION	RECEIVER SIGNATURE	SHRINKWRAP INTACT ☐ YES ☐ NO	TIME:
		PCS DELIVERED	DEL. DATE
FIRM NAME (PRINT)	RECEIVER NAME (PRINT)	OSD EXC. NBR	UNIT
			DRIVER SIGNATURE

CONSIGNEE RECEIPT/3

Exhibit G

CDM Camp Dresser & McKee

RESIDENT ENGINEER'S DAILY REPORT

PROJECT:	**MWRA Contract No. 6280** **Weston Aqueduct Supply Mains 1 & 2, Sections 2, 3, 4, 5, & 6**
CONTRACTOR:	**Spiniello Companies** **35 Airport Rd., Morristown, NJ 07962-1968**
LOCATION:	**Newton, Massachusetts**

DATE: 7-24-00 **WEATHER:** Sunny & fair **TEMP:** 58° AM - 77° noon - 80° PM

WORK OF GENERAL CONTRACTOR

WASM 2, Section 5:
Station 67+36 (Auburn St.) towards Station 76+40 (Arapahoe Rd.):

- Worked on preparing the joint-mating surface for internal joint seals installations.
- Worked on delivering the joint seals into the pipe.
- Worked on joint seal installations.
  15 joint seals installed. Testing will begin tomorrow, July 25.

Station 84+16 (Oldham Rd.) back to Station 76+40 (Arapahoe Rd.):
Cement mortar lined 775 lf of CI pipe with a ½" troweled pass:

9:15 AM	Begin lining at Station 84+10 +/-.
9:45 AM	One set of three, cement-mortar samples taken and stored. Station 83+75 +/-. Problem with the control box for the trowels. Stopped lining.
10:10 AM	Repair complete; resumed lining.
12:30 PM	One set of three, cement-mortar samples taken and stored. Station 80+00 +/-.
5:45 PM	End lining run at Station 76+40 +/-. 21 pre-mix bags used.

Station 100+74 (Temple St. air valve) towards Station 106+65 (Ruane Rd.):

- Worked on pressure washing scraped tuberculation from the pipe. Completed run.

Station 128+00 (Bristol St.) towards Station 141+00 (Risley Rd.):

- Worked on cleaning the CI joints.
- Worked on cleaning the CI pipe using a mechanical scraping machine.

WORK OF SUBCONTRACTORS

ODF: On site to provide and install the internal joint seals.
Equipment: 1 – pickup truck Manpower: 2

SPECIAL NOTES

- An internal inspection of the WASM 2 was conducted from Station 76+40 to Station 84+16. The pipe appears to be clean, free of defects, and suitable for a cement-mortar lining.
- The contractor took delivery of 16 pre-mixed bags of 1:1 sand & cement at Station 94+50.
- Bill Haynes, Brico Rep., on site to supervise the installation of the internal joint seals.

CONTRACTOR'S MANPOWER & EQUIPMENT

Manpower: 30
Equipment: 2 – F700 winch trucks, 1 – Lull 644D-34 forklift, 3 – IR 125KVA generators,
3 – fans, 1 – JD 410E backhoe/ loader, 1 – F600 dump truck,
3 – IR 185 air compressors, 1 – lining machine, 1 – feeder machine, 1 – buggy,
1 – cement-mixer mounted on trailer, 1 – cleaning machine.

POLICE DETAILS

Manpower: 1

SUBMITTED BY

Christopher R. Houde

Christopher R. Houde
for
James M. Glendye Sr.

Exhibit H

CDM Camp Dresser & McKee

RESIDENT ENGINEER'S DAILY REPORT

PROJECT:	**MWRA Contract No. 6280** **Weston Aqueduct Supply Mains 1 & 2, Sections 2, 3, 4, 5, & 6**
CONTRACTOR:	**Spiniello Companies** **35 Airport Rd., Morristown, NJ 07962-1968**
LOCATION:	**Newton, Massachusetts**

DATE: 7-25-00 **WEATHER:** Sunny & fair **TEMP:** 58° AM - 77° noon - 80° PM

WORK OF GENERAL CONTRACTOR

WASM 2, Section 5:
Station 67+36 (Auburn St.) towards Station 76+40 (Arapahoe Rd.):

- Worked on preparing the joint-mating surface for internal joint seals installations.
- Worked on delivering the joint seals into the pipe.
- Worked on joint seal installations. 15 seals installed.
- Began testing the joint seals. See attachment.

Station 84+16 (Oldham Rd.) to Station 94+50 (Temple St.):
Cement mortar lined 450 lf of CI pipe with a ½" troweled pass:

9:30 AM	Begin lining at Station 84+50 +/-.
11:30 AM	One set of three, cement-mortar samples taken and stored. Station 86+00+/-.
2:45 PM	End lining run at Station 89+00 +/-. 14 pre-mix bags used.

Station 94+50 (Temple St.) towards Station 106+65 (Ruane Rd.):

- Worked on filling the CI joint gaps with cement-mortar.

Station 117+00 (Dartmouth St.) towards Station 106+65 (Ruane Rd.):

- Worked on pressure washing scraped tuberculation from the pipe.

Station 128+00 (Bristol St.) back towards Station 117+00 (Dartmouth St.):

- Worked on removing scraped tuberculation using a "vac" truck.

Station 128+00 (Bristol St.) towards Station 141+00 (Risley Rd.):

- Worked on cleaning the CI joints.
- Worked on cleaning the CI pipe using a mechanical scraping machine.

WORK OF SUBCONTRACTORS

- ODF: On site to provide and install the internal joint seals.
  Equipment: 1 – pickup truck Manpower: 2
- Clogbusters: On site to provide one "vac" truck & one operator.

SPECIAL NOTES

- An internal inspection of the WASM 2 was conducted from Station 84+16 to Station 94+50. The pipe appears to be clean, free of defects, and suitable for a cement-mortar lining.
- Bill Haynes, Brico Rep., on site to supervise the installation of the internal joint seals.
- Began testing the internal joint seals. See attachment.

CONTRACTOR'S MANPOWER & EQUIPMENT

Manpower: 32
Equipment: 2 – F700 winch trucks, 1 – Lull 644D-34 forklift, 3 – IR 125KVA generators,
3 – fans, 1 – JD 410E backhoe/ loader, 1 – F600 dump truck,
3 – IR 185 air compressors, 1 – lining machine, 1 – feeder machine, 1 – buggy,
1 – cement-mixer mounted on trailer, 1 – cleaning machine.

POLICE DETAILS

Manpower: 1

SUBMITTED BY

Christopher R. Houde

Christopher R. Houde
for
James M. Glendye Sr.

Memorandum

To: James M. Glendye, Sr.
From: Christopher R. Houde
Date: July 25, 2000
Subject: MWRA Contract #6280
Re: Supplement to Daily Report

Tuesday, July 25, 2000

Bill Haines, Brico Rep., was on site today to supervise the initial internal joints seal installations. Fifteen (15) joint seals were installed on Monday, July 24. Ten (10) joint seals were install on the morning of Tuesday, July 25, 2000. The following is a record of the testing of the internal joint seal installations.

- Bill Haines on site at Station 67+36, Section 5.

- The installation crew, B. Haines, & C. Houde proceeded forty joints to Station 72+25 +/-.
  Joint #40.
  - Introduced 5 psi into the joint.
  - A leak was observed in the East band at the wedge. **Failed initial test.**
  - The East band was expanded to 4000 psi, and the #1 wedge was replaced with a #2 wedge.
  - Introduced 5 psi into the joint.
  - The test pressure held @ 4psi.
  - No visual evidence of leaks in the seal or at the joint seal-mating surface.
  - **Passed test.**

- Joint #35
  - Introduced 5 psi into the joint.
  - A leak was observed in the East band at the wedge. **Failed initial test.**
  - The East band was expanded to 4000 psi, and the #3 wedge was replaced with a #4 wedge.
  - Introduced 5 psi into the joint. A leak was observed in the East band at the wedge.
  - Removed east band and repositioned wedge from 3 o'clock to 9 o'clock.
  - Introduced 5 psi into the joint. A leak was observed in the East band at the wedge.
  - The East band was expanded to 4000 psi, and the #4 wedge was replaced with a #5 wedge.
  - Introduced 5 psi into the joint. A leak was observed in the East band at the wedge.
  - Removed east band and repositioned wedge from 9 o'clock to 4 o'clock.
  - Introduced 5 psi into the joint. A leak was observed in the East band at the wedge.
  - The East band was expanded to 5000 psi to remove the wedge, and the hydraulic jack became bound while expanded on the band. No further testing today.
  - **Failed test.**

END

CDM Camp Dresser & McKee

RESIDENT ENGINEER'S DAILY REPORT

PROJECT:	**MWRA Contract No. 6280** **Weston Aqueduct Supply Mains 1 & 2, Sections 2, 3, 4, 5, & 6**
CONTRACTOR:	**Spiniello Companies** **35 Airport Rd., Morristown, NJ 07962-1968**
LOCATION:	**Newton, Massachusetts**

DATE: 7-26-00 **WEATHER:** Light rain **TEMP:** 63° AM - 65° noon - 65° PM

WORK OF GENERAL CONTRACTOR

WASM 2, Section 5:
Station 67+36 (Auburn St.) towards Station 76+40 (Arapahoe Rd.):
- Worked on testing the joint seals. See attachment.

Station 76+40 (Arapahoe Rd.) towards Station 84+16 (Oldham Rd.):
- Worked on preparing the joint-mating surface for internal joint seals installations.
- Worked on delivering the joint seals into the pipe.

Station 84+16 (Oldham Rd.) to Station 94+50 (Temple St.):
Cement mortar lined 550 lf of CI pipe with a ½" troweled pass:

8:30 AM	Begin lining at Station 89+00 +/-.
10:00 AM	One set of three, cement-mortar samples taken and stored. Station 90+75+/-.
12:00 PM	One set of three, cement-mortar samples taken and stored. Station 93+00+/-.
1:30 PM	End lining run at Station 94+50 +/-.

Station 94+50 (Temple St.) towards Station 106+65 (Ruane Rd.):
- Worked on filling the CI joint gaps with cement-mortar.

Station 117+00 (Dartmouth St.) towards Station 106+65 (Ruane Rd.):
- Worked on grinding the joint –mating surface for the internal joint seals.

Station 128+00 (Bristol St.) back towards Station 117+00 (Dartmouth St.):
- Worked on pressure washing scraped tuberculation from the pipe.

Station 128+00 (Bristol St.) towards Station 141+00 (Risley Rd.):
- Worked on removing scraped tuberculation using a "vac" truck.

WORK OF SUBCONTRACTORS

- ODF: On site to provide and install the internal joint seals.
  Equipment: 1 – pickup truck Manpower: 2
- Clogbusters: On site to provide one "vac" truck & one operator.

SPECIAL NOTES

- Testing of the internal joint seals continued. See attachment.
- An internal inspection of the WASM 2 was conducted from Station 94+50 to Station 106+65. The pipe appears to be clean, free of defects, and suitable for a cement-mortar lining from Station 94+50 to Station 102+50 (800'). The remaining 400' require further cleaning.

CONTRACTOR'S MANPOWER & EQUIPMENT

Manpower: 34
Equipment: 2 – F700 winch trucks, 1 – Lull 644D-34 forklift, 3 – IR 125KVA generators,
3 – fans, 1 – JD 410E backhoe/ loader, 1 – F600 dump truck,
3 – IR 185 air compressors, 1 – lining machine, 1 – feeder machine, 1 – buggy,
1 – cement-mixer mounted on trailer.

POLICE DETAILS

Manpower: none

SUBMITTED BY

Christopher R. Houde

Christopher R. Houde
for
James M. Glendye Sr.

Memorandum

To: James M. Glendye, Sr.
From: Christopher R. Houde
Date: July 26, 2000
Subject: MWRA Contract #6280
Re: Supplement to Daily Report

Wednesday, July 26, 2000

Bill Haines, Brico Rep., was on site today to supervise the initial internal joints seal installations. The following is a record of the day's internal joint seal installation testing:

Joint #35

- Re-installed the East band with a #5 wedge.
- Introduced 6 psi into the joint.
- The test pressure dropped to 3.5 psi.
- No visual evidence of leaks in the seal or at the joint seal-mating surface.
- **Passed test.**

Joint #34

- Introduced 6 psi into the joint.
- The test pressure held at 6 psi.
- No visual evidence of leaks in the seal or at the joint seal-mating surface.
- **Passed test.**

Joint #36

- Introduced 5 psi into the joint.
- Leaks were observed in the East and West bands. **Failed initial test.**
- The East and West bands were re-expanded and larger wedges were installed.
- The leak in the West band was corrected, but the leak in the East band remained.
- It was observed that when the pressure was released from the jack, the load transferred to the chip causing the band to lift away from the pipe. The end point of the band was determined to be bent.
- A larger band size was installed in the Eastern position with a #0 wedge.
- Introduced 5 psi into the joint. A leak was observed in the East band at the wedge.
- The East band was expanded to 4000 psi, and the #0 wedge was replaced with a #2 wedge.
- Introduced 5 psi into the joint.
- The test pressure dropped to 3 psi.
- No visual evidence of leaks in the seal or at the joint seal-mating surface.
- **Passed test.**

Joint #37

- Introduced 5 psi into the joint. A leak was observed in the West band at 6 o'clock. **Failed initial test.**
- The West band was expanded to 4000 psi, and the #4 wedge was replaced with a #5 wedge.
- Introduced 5 psi into the joint. A leak was observed in the West band at the wedge.
- Removed West band and repositioned wedge from 3 o'clock to 9 o'clock.
- The East band was expanded to 3000 psi, and the #5 wedge was loose.
- No further testing of the joint seal. Not installed.
- **Failed test.**

Memorandum

Wednesday, July 26, 2000
(Continued)

Joint #38

Note: The East side of the joint seal has a ¼" transition sleeve under the joint seal.

- Introduced 5 psi into the joint.
- A leak was observed in the West band at the wedge and at 7 o'clock. **Failed initial test.**
- The West band was expanded to 1700 psi, and the wedge was found to be loose.
- The West band was expanded to 3500 psi, and the wedge was replaced with a #5 wedge.
- Introduced 5 psi into the joint. A leak was observed in the East band at the wedge.
- The East band was expanded to 3000 psi, and the #3 wedge was found to be loose.
- The East band was expanded to 3500 psi, and the wedge was replaced with a #5 wedge.
- Introduced 5 psi into the joint. A leak was observed in the East band at the wedge.
- The band, seal, and transition rubber were removed and the surface of the pipe was inspected. There was no evidence of mortar splatter or other imperfections on the pipe wall.
- **Failed test.**

Joint #39

- Introduced 5 psi into the joint.
- A leak was observed in the East band at the wedge. **Failed initial test.**
- The East band was expanded to 3500 psi, and the #0 wedge was replaced with a #2 wedge.
- Introduced 6 psi into the joint.
- The test pressure held at 6 psi.
- No visual evidence of leaks in the seal or at the joint seal-mating surface.
- **Passed test.**

Joint #33

- Introduced 5 psi into the joint.
- A leak was observed in the West band. **Failed initial test.**
- The East band was expanded to 4000 psi, and the wedge was replaced with a #4 wedge.
- The East band was re-positioned with the wedge move from 9 o'clock to 3 o'clock.
- Introduced 5 psi into the joint. A leak was observed in the East band.
- The seal and bands were removed and the seal was re-positioned in the pipe.
- Introduced 5 psi into the joint. A leak was observed in the East band.
- No further testing of the joint seal.
- **Failed test.**

Joint #32

- Introduced 6 psi into the joint.
- The test pressure held at 6 psi.
- No visual evidence of leaks in the seal or at the joint seal-mating surface.
- **Passed test.**

Joint #35

- Introduced 5 psi into the joint.
- A leak was observed in the East band at the wedge. **Failed initial test.**
- No further testing of the joint seal.
- **Failed test.**

END

Exhibit I

CDM Camp Dresser & McKee

RESIDENT ENGINEER'S DAILY REPORT

PROJECT:	**MWRA Contract No. 6280** **Weston Aqueduct Supply Mains 1 & 2, Sections 2, 3, 4, 5, & 6**
CONTRACTOR:	**Spiniello Companies** **35 Airport Rd., Morristown, NJ 07962-1968**
LOCATION:	**Newton, Massachusetts**

DATE: 7-31-00 **WEATHER:** Drizzle & rain **TEMP:** 63° AM - 65° noon - 65° PM

WORK OF GENERAL CONTRACTOR

WASM 2, Section 5:
Station 57+23 to Station 141+00:

- A five-man crew worked on general site cleanup at all excavations sites.

Station 57+23 (Robinhood Rd.) to Station 67+36 (Auburn St.):

- Worked on preparing the joint-mating surface for internal joint seals installations.

Station 67+36 (Auburn St.) to Station 76+40 (Arapahoe Rd.):

- Worked on internal joint seal installations.

Station 76+40 (Arapahoe Rd.) to Station 84+16 (Oldham Rd.):

- Worked on preparing the joint-mating surface for internal joint seals installations.

Station 117+00 (Dartmouth St.) towards Station 106+65 (Ruane Rd.):

- Worked on grinding the joint –mating surface for the internal joint seals.

Station 128+00 (Bristol St.) towards Station 141+00 (Risley Rd.):

- Worked on cleaning the CI joints.

WORK OF SUBCONTRACTORS

- ODF: On site to provide and install the internal joint seals.
  Equipment: 1 – pickup truck Manpower: 2

SPECIAL NOTES

- Tom Porter & Vladimir Petrinko (Brico) on site to supervise and evaluate the internal joint seal installations.
- John Daignon (Newton DPW) on site to review project progress with the contractor.

CONTRACTOR'S MANPOWER & EQUIPMENT

Manpower: 32
Equipment: 2 – F700 winch trucks, 1 – Lull 644D-34 forklift, 3 – IR 125KVA generators, 3 – fans, 1 – JD 410E backhoe/ loader, 1 – F600 dump truck, 3 – IR 185 air compressors.

POLICE DETAILS

Manpower: none

SUBMITTED BY

Christopher R. Houde

Christopher R. Houde
for
James M. Glendye Sr.

CDM Camp Dresser & McKee

RESIDENT ENGINEER'S DAILY REPORT

PROJECT:	**MWRA Contract No. 6280** **Weston Aqueduct Supply Mains 1 & 2, Sections 2, 3, 4, 5, & 6**
CONTRACTOR:	**Spiniello Companies** **35 Airport Rd., Morristown, NJ 07962-1968**
LOCATION:	**Newton, Massachusetts**

DATE: 8-1-00 **WEATHER:** Drizzle & rain **TEMP:** 60° AM - 65° noon - 65° PM

WORK OF GENERAL CONTRACTOR

WASM 2, Section 5:
Station 57+23 to Station 141+00:

- A five-man crew worked on general site cleanup at all excavations sites.

Station 57+23 (Robinhood Rd.) to Station 67+36 (Auburn St.):

- Worked on preparing the joint-mating surface for internal joint seals installations.

Station 67+36 (Auburn St.) towards Station 76+40 (Arapahoe Rd.):

- Worked on internal joint seal installations (Jt. Numbers 1 through 40).

Station 76+40 (Arapahoe Rd.) to Station 84+16 (Oldham Rd.):

- Worked on preparing the joint-mating surface for internal joint seals installations.

Station 106+65 (Ruane Rd.) towards Station 117+00 (Dartmouth St.):

- Worked on filling the CI joint gaps with cement-mortar.

Station 128+00 (Bristol St.) towards Station 141+00 (Risley Rd.):

- Worked on cleaning the CI joints.

Station 141+00 (Risley Rd.) towards Station 9+60 (Section 6, Valentine St.):

- Worked on cleaning the CI pipe using a mechanical scraping machine.

Note: The mechanical scraping machine broke down after two hours of use.

WORK OF SUBCONTRACTORS

- ODF: On site to provide and install the internal joint seals.
  Equipment: 1 – pickup truck Manpower: 2

SPECIAL NOTES

- Tom Porter & Vladimir Petrinko (Brico) on site to supervise and evaluate the internal joint seal installations.
- Bob DePonte on site to review construction progress.

CONTRACTOR'S MANPOWER & EQUIPMENT

Manpower: 32
Equipment: 2 – F700 winch trucks, 1 – Lull 644D-34 forklift, 2 – IR 125KVA generators,
3 – fans, 1 – JD 410E backhoe/ loader, 1 – F600 dump truck,
3 – IR 185 air compressors, 1 – IR 50KW generator.

POLICE DETAILS

Manpower: 1

SUBMITTED BY

Christopher R. Houde

Christopher R. Houde
for
James M. Glendye Sr.

CDM Camp Dresser & McKee

RESIDENT ENGINEER'S DAILY REPORT

PROJECT:	**MWRA Contract No. 6280** **Weston Aqueduct Supply Mains 1 & 2, Sections 2, 3, 4, 5, & 6**
CONTRACTOR:	**Spiniello Companies** **35 Airport Rd., Morristown, NJ 07962-1968**
LOCATION:	**Newton, Massachusetts**

DATE: 8-7-00 **WEATHER:** Partly cloudy **TEMP:** 70° AM - 80° noon - 87° PM

WORK OF GENERAL CONTRACTOR

WASM 2, Section 5:
Station 67+36 (Auburn St.) to Station 76+40 (Arapahoe Rd.):
- Worked on hand finishing adjacent to the internal joint seals.
- Worked on internal joint seal installations.

Station 117+00 (Dartmouth St.) towards Station 128+00 (Bristol St.):
- Worked on filling the CI joint gaps with cement-mortar.

Station 128+00 (Bristol St.) towards Station 141+00 (Risley Rd.):
- Worked on pressure washing scraped tuberculation from the pipe.

Station 141+00 (Risley Rd.) to Station 9+60 (Section 6, Valentine St.):
- Worked on removing scraped tuberculation using a "vac" truck.
- Worked on cleaning the CI joints.

WASM 2, Section 6:
Station 9+27 (+/-) & Station 10+01 (+/-):
- Excavated test pits at the extents of the Valentine St. relay.

Station 9+60 (Valentine St.) towards Station 18+30 (Beaumont St.):
- Worked on cleaning the CI pipe using a mechanical scraping machine. Completed run.

WORK OF SUBCONTRACTORS

- ODF: On site to provide and install the internal joint seals.
  Equipment: 1 – pickup truck Manpower: 3
- Clogbusters: On site to provide one "vac" truck & one operator.

SPECIAL NOTES

- Tom Porter & Vladimir Petrinko (Brico) on site to supervise and evaluate the internal joint seal installations.
- The subcontractor pre-tested 13 joint seals installed on 8-4-00. 2 of the 13 passed. The subcontractor worked on correcting the 11 failed seals.

CONTRACTOR'S MANPOWER & EQUIPMENT

Manpower: 32
Equipment: 2 – F700 winch trucks, 1 – Lull 644D-34 forklift, 2 – IR 125KVA generators,
3 – fans, 1 – JD 410E backhoe/ loader, 1 – F600 dump truck,
3 – IR 185 air compressors, 1 – IR 50KW generator, 1 – cleaning machine.

POLICE DETAILS

Manpower: 1

SUBMITTED BY

Christopher R. Houde

Christopher R. Houde
for
James M. Glendye Sr.

Exhibit J

PO BOX 48776
ATLANTA, GA 30362
PHONE: (770) 840-0662
FAX: (770) 840-8312

BRICO INDUSTRIES, INC
A Victaulic® Company

FAX TRANSMISSION

TO: JOHN WALSH **FROM:** TOM PORT

CO: SPINIELLO CONST. CO. **PAGES:** 1

Fax: 617-559-0362 **PHONE:** 617-559-1055

Date: 8/9/00

Re: **MWRA WESTON AQUEDUCT PROJECT**

● **Comments:** This fax will confirm our conversations that took place during my job site visit of August 7 & 8, 2000.

1: The Innerseal installation process was classified into 5 groups:

a. Those that install with no problem and pass the 5 PSI air test.

b. Those that cannot be installed due to a taper in one or both of the pipe ends at a joint; i.e. the bands walk-off the rubber sleeve.

c. Those that cannot be installed due a manufacturing defect in the rubber sleeve.

d. Those that cannot be installed due to an error in the measurement at the specific joint, i.e. the bands require a spacer greater than the design.

e. The joint has not been properly cleaned and will require excessive time by the installing crew to clean prior to Innerseal installation.

It was agreed that when the installing crew came to a joint that fell into classes B through E they were to proceed to the next joint.

It was determined that there are areas in the pipeline, manholes or other openings, that are going to require an extra wide Innerseal. These areas are to be measured by Spiniello prior to manufacture. At joints 65 & 66 this was not done and two sets of sleeves and bands have already been furnished. This material should be able to be used at other joints.

It was determined that at the joints were the bands walk-off the standard sleeve a wider Innerseal may be required. The width of these types of sleeves will have to be determined by Spiniello. We can offer our standard design, using NSF material, in up to 18" +_ widths.

Exhibit K

CDM Camp Dresser & McKee

RESIDENT ENGINEER'S DAILY REPORT

PROJECT:	**MWRA Contract No. 6280** **Weston Aqueduct Supply Mains 1 & 2, Sections 2, 3, 4, 5, & 6**
CONTRACTOR:	**Spiniello Companies** **35 Airport Rd., Morristown, NJ 07962-1968**
LOCATION:	**Newton, Massachusetts**

DATE: 10-19-00 **WEATHER:** Partly cloudy **TEMP:** 46° AM - 57° noon - 55° PM

WORK OF GENERAL CONTRACTOR

WASM 2, Section 5:
Station 67+36 (Auburn St.):
- Completed installation of the Brico couplings.

Note: Bill Haines on site to advise Spiniello on the installation of the Brico couplings.

Station 76+40 (Arapahoe Rd.) to Station 84+16 (Oldham Rd.):
- Worked on cleaning mortar debris off the internal joint seals.
- Worked on hand finishing adjacent to the internal joint seals.

Station 84+16 (Oldham Rd.):
- Removed the 60" x 12" blow off tee and 60" x 36" reducer.
- Worked on hand finishing 36" and 60" CI pipe to remain.

Station 94+50 (Temple St.) to Station 106+65 (Ruane Rd.):
- Worked on installing the internal joint seals.
- Excavated below the invert of the 60" pipe for pipe cuts.

Station 141+00, Section 5 (Risley Rd.) to Station 9+60, Section 6 (Valentine St.):
- Worked on installing the internal joint seals.

WORK OF SUBCONTRACTORS

ODF: On site to install the internal joint seals.
Manpower: 5 Equipment: 1 – F350 pickup truck.

SPECIAL NOTES

- An internal inspection of the cement-mortar lining was conducted today from Station 67+36 to Station 76+40. Several (10 +/-) minor deficiencies were marked in the pipe. The remainder of the lining appeared satisfactory. However, during the inspection, a Brico internal joint seal was discovered to have developed a hole at the vulcanized bond of the joint seal material. The following actions were taken:
  - All Brico joint seals installed on the project were visually inspected at the subject bonding area. None were found to be defective.
  - Polaroid photographs of the in place defective seal were taken.
  - The contractor removed the defective seal and replaced it with a Miller joint seal.
  - The defective seal was brought to the CDM field office for inspection.
- An internal inspection of the cement-mortar lining was conducted today from Station 57+87 to Station 67+36. All areas of deficiency marked in the pipe had been corrected and appear satisfactory.
- ODF worked on securing the threaded plugs in the test ports of the internal joint seals from Station 84+16 to Station 94+50.

CONTRACTOR'S MANPOWER & EQUIPMENT

Manpower: 15
Equipment: 1 – F700 winch truck, 1 – JD 410E backhoe/ loader, 1 – F600 dump truck,
1 – Komatsu PC400LC backhoe, 1 – Komatsu WA250 front-end loader,
1 – IR 185 air compressor, 1 – IR 50KW generator.

POLICE DETAILS

Manpower: 1

SUBMITTED BY

Christopher R. Houde
for
James M. Glendye Sr.

CDM Camp Dresser & McKee

RESIDENT ENGINEER'S DAILY REPORT

PROJECT:	**MWRA Contract No. 6280** **Weston Aqueduct Supply Mains 1 & 2, Sections 2, 3, 4, 5, & 6**
CONTRACTOR:	**Spiniello Companies** **35 Airport Rd., Morristown, NJ 07962-1968**
LOCATION:	**Newton, Massachusetts**

DATE: 1-25-01 **WEATHER:** Overcast **TEMP:** 10° AM - 36° noon - 35° PM

WORK OF GENERAL CONTRACTOR

WASM 2, Section 5:
Station 63+13:
- Tested the MH joint seals successfully.

Station 67+36 (Central St.):
- Worked on installing the joint seals at the couplings and the 12" blow off seal.

Station 76+52 (Arapahoe Rd.):
- Worked on excavating and removing pipe items within access location.
- Installed the MH abandonment seals at Station 74+68. Tested satisfactorily.
- Installed the extra wide seal at Station 76+23. Tested satisfactorily.

Station 128+00 (Bristol Rd.) back towards Station 117+00 (Dartmouth St.):
- Worked on hand finishing.
- Worked on cleaning the joint seals and CML.

Station 128+00 (Bristol Rd.) to Station 141+00 (Prince St.):
- Worked on hand finishing.
- Worked on cleaning the joint seals and CML.
- Installed the blind flange at Station 134+53, and filed the MH cavity with cement.

Station 144+70:
- Installed the MH abandonment seals.

WASM 2, Section 6:
Station 18+30 (Beaumont St.) to Station 29+15 (Bullough's Pond):
- Worked on hand finishing.

WORK OF SUBCONTRACTORS

- ODF: On site to install the internal joint seals.
  Manpower: 4 Equipment: 1 – F350 pickup truck.

SPECIAL NOTES

Testing of the internal joint seals was completed today from Station 76+40 towards Station 63+13. Four seals of the remaining Brico seals were found to have defects and will be removed and replaced with Miller seals. See attachment.

CONTRACTOR'S MANPOWER & EQUIPMENT

Manpower: 30
Equipment: 2 – F700 winch trucks, 1 – JD 410E backhoe/ loader, 1 – F600 dump truck,
1 – Komatsu PC400LC backhoe, 1 – Komatsu WA250 front-end loader,
2 – IR 185 air compressors, 1 – IR 50KW generator, 1 – Link Belt 2650 excavator,
1 – JD 270 backhoe, 1 – 10 whl dump truck.

POLICE DETAILS

Manpower: 1 @ Valentine St.

SUBMITTED BY

Christopher R. Houde

Christopher R. Houde
for
James M. Glendye Sr.

5723-6736

MWRA Project # 6280 25-Jan-01
60" Joint Seal Location DATE = Seal Physically Tested C. R. H.
WASM 2 - Section 5 *DATE* = Seal Included in Batch/ Not tested
As Measured From Station 57+87

Joint #	Distance (ft.)	Pipe Station	Date Tested	Comments		Joint #	Distance (ft.)	Pipe Station	Date Tested	Comments	
0	958.50	67+45.5		@ cplg		47	486.67	62+73.7	18-Sep-00	Miller	
1	947.67	67+34.7	17-Aug-00	Brico		48	474.50	62+61.5	18-Sep-00	Miller	
2	944.42	67+31.4	17-Aug-00	Brico		49	462.33	62+49.3	*20-Sep-00*	Miller	
3	940.42	67+27.4	17-Aug-00	Brico		50	450.25	62+37.3	*20-Sep-00*	Miller	
4	928.33	67+15.3	17-Aug-00	Brico	#	51	438.33	62+25.3	*20-Sep-00*	Miller	
5	916.17	67+03.2	17-Aug-00	Brico		52	434.33	62+21.3	*20-Sep-00*	Miller	
6	904.17	66+91.2	17-Aug-00	Brico		53	42.25	58+29.3	*20-Sep-00*	Miller	
7	892.92	66+79.9	*25-Sep-00*	Miller		54	410.08	61+97.1	*20-Sep-00*	Miller	
8	887.83	66+74.8	17-Aug-00	Brico		55	398.00	61+85.0	*20-Sep-00*	Miller	
9	875.67	66+62.7	17-Aug-00	Brico	#	56	385.08	61+72.1	28-Aug-00	Brico	
10	863.50	66+50.5	17-Aug-00	Brico		57	374.00	61+61.0	*20-Sep-00*	Miller	
11	851.50	66+38.5	17-Aug-00	Brico		57.5	370.00	61+57.0	*20-Sep-00*	Miller	
12	839.25	66+26.3	17-Aug-00	Brico		58	366.00	61+53.0	28-Aug-00	Brico	
13	827.08	66+14.1	17-Aug-00	Brico		59	354.83	61+41.8	*20-Sep-00*	Miller	
14	825.00	66+12.0	17-Aug-00	Brico		60	341.83	61+28.8	*20-Sep-00*	Miller	
15	803.83	65+90.8	17-Aug-00	Brico		61	329.67	61+16.7	28-Aug-00	Brico	
16	791.83	65+78.8	17-Aug-00	Brico		62	317.67	61+04.7	28-Aug-00	Brico	
17	778.67	65+65.7	17-Aug-00	Brico		63	305.58	60+92.6	28-Aug-00	Brico	
18	766.58	65+53.6	17-Aug-00	Brico		64	301.75	60+88.8			
19	754.50	65+41.5	17-Aug-00	Brico		65	289.50	60+76.5	24-Aug-00	Brico	#
20	742.33	65+29.3	15-Aug-00	Brico		66	27.42	58+14.4	24-Aug-00	Brico	
21	730.33	65+17.3	15-Aug-00	Brico	#	67	265.42	60+52.4	*20-Sep-00*	Miller	
22	718.17	65+05.2				68	253.33	60+40.3	*20-Sep-00*	Miller	
23	706.17	64+93.2	15-Aug-00	Brico		69	241.33	60+28.3	*20-Sep-00*	Miller	
24	693.00	64+80.0				70	229.25	60+16.3	*20-Sep-00*	Miller	
25	682.00	64+69.0	*25-Sep-00*	Miller		71	217.33	60+04.3	*20-Sep-00*	Miller	
26	670.92	64+57.9	15-Aug-00	Brico		72	205.33	59+92.3	*20-Sep-00*	Miller	
27	657.83	64+44.8	15-Aug-00	Brico		73	193.17	59+80.2	24-Aug-00	Miller	#
28	645.83	64+32.8	*25-Sep-00*	Miller		74	181.00	59+68.0	24-Aug-00	Miller	
29	642.17	64+29.2	17-Aug-00	Brico		75	169.08	59+56.1	24-Aug-00	Brico	
30	630.08	64+17.1	*25-Sep-00*	Miller		76	156.00	59+43.0	24-Aug-00	Brico	
31	618.00	64+05.0	25-Sep-00	Miller		77	144.00	59+31.0	24-Aug-00	Brico	
32	606.75	63+93.8	*25-Sep-00*	Miller		78	132.00	59+19.0	28-Aug-00	Brico	
33	601.25	63+88.3	*25-Sep-00*	Miller		79	129.00	59+16.0	23-Aug-00	Brico	
34	592.17	63+79.2	*25-Sep-00*	Miller		80	108.67	58+95.7	23-Aug-00	Brico	
35	587.67	63+74.7	*25-Sep-00*	Miller		81	96.58	58+83.6	23-Aug-00	Brico	
36	575.67	63+62.7	*25-Sep-00*	Miller		82	84.50	58+71.5	*20-Sep-00*	Miller	
37	563.67	63+50.7	*25-Sep-00*	Miller		83	72.42	58+59.4	23-Aug-00	Brico	
38	551.67	63+38.7	*25-Sep-00*	Miller		84	60.50	58+47.5	23-Aug-00	Brico	
39	539.50	63+26.5	25-Sep-00	Miller		85	48.33	58+35.3	23-Aug-00	Brico	
40	535.83	63+22.8	25-Sep-00	Miller		86	36.17	58+23.2	20-Sep-00	Miller	
41	532.00	63+19.0	15-Aug-00	Brico		87	24.33	58+11.3	23-Aug-00	Brico	
42	528.42	63+15.4	15-Aug-00	Brico		88	12.17	57+99.2	23-Aug-00	Brico	#
43	523.75	63+10.8	15-Aug-00	Brico		89	0.00	57+87.0	20-Sep-00	Miller	
44	511.67	62+98.7	18-Sep-00	Miller		90					
45	499.67	62+86.7	18-Sep-00	Miller		**92**	**TOTAL JOINTS**		6.67%		
46	490.50	62+77.5	18-Sep-00	Miller		**87**	**JOINTS INSTALLED**				

5723-6736

MWRA Project # 6280 25-Jan-01
60" Joint Seal Location DATE = Seal Physically Tested C. R. H.
WASM 2 - Section 5 *DATE* = Seal Included in Batch/ Not tested
As Measured From Station 57+87

Joint #	Distance (ft.)	Pipe Station	Date Tested	Comments		Joint #	Distance (ft.)	Pipe Station	Date Tested	Comments	
0	958.50	67+45.5		@ cplg		47	486.67	62+73.7	18-Sep-00	Miller	
1	947.67	67+34.7	17-Aug-00	Brico		48	474.50	62+61.5	18-Sep-00	Miller	
2	944.42	67+31.4	17-Aug-00	Brico		49	462.33	62+49.3	*20-Sep-00*	Miller	
3	940.42	67+27.4	17-Aug-00	Brico		50	450.25	62+37.3	*20-Sep-00*	Miller	
4	928.33	67+15.3	17-Aug-00	Brico	#	51	438.33	62+25.3	*20-Sep-00*	Miller	
5	916.17	67+03.2	17-Aug-00	Brico		52	434.33	62+21.3	*20-Sep-00*	Miller	
6	904.17	66+91.2	17-Aug-00	Brico		53	42.25	58+29.3	*20-Sep-00*	Miller	
7	892.92	66+79.9	*25-Sep-00*	Miller		54	410.08	61+97.1	*20-Sep-00*	Miller	
8	887.83	66+74.8	17-Aug-00	Brico		55	398.00	61+85.0	*20-Sep-00*	Miller	
9	875.67	66+62.7	17-Aug-00	Brico	#	56	385.08	61+72.1	28-Aug-00	Brico	
10	863.50	66+50.5	17-Aug-00	Brico		57	374.00	61+61.0	*20-Sep-00*	Miller	
11	851.50	66+38.5	17-Aug-00	Brico		57.5	370.00	61+57.0	*20-Sep-00*	Miller	
12	839.25	66+26.3	17-Aug-00	Brico		58	366.00	61+53.0	28-Aug-00	Brico	
13	827.08	66+14.1	17-Aug-00	Brico		59	354.83	61+41.8	*20-Sep-00*	Miller	
14	825.00	66+12.0	17-Aug-00	Brico		60	341.83	61+28.8	*20-Sep-00*	Miller	
15	803.83	65+90.8	17-Aug-00	Brico		61	329.67	61+16.7	28-Aug-00	Brico	
16	791.83	65+78.8	17-Aug-00	Brico		62	317.67	61+04.7	28-Aug-00	Brico	
17	778.67	65+65.7	17-Aug-00	Brico		63	305.58	60+92.6	28-Aug-00	Brico	
18	766.58	65+53.6	17-Aug-00	Brico		64	301.75	60+88.8			
19	754.50	65+41.5	17-Aug-00	Brico		65	289.50	60+76.5	24-Aug-00	Brico	#
20	742.33	65+29.3	15-Aug-00	Brico		66	27.42	58+14.4	24-Aug-00	Brico	
21	730.33	65+17.3	15-Aug-00	Brico	#	67	265.42	60+52.4	*20-Sep-00*	Miller	
22	718.17	65+05.2				68	253.33	60+40.3	*20-Sep-00*	Miller	
23	706.17	64+93.2	15-Aug-00	Brico		69	241.33	60+28.3	*20-Sep-00*	Miller	
24	693.00	64+80.0				70	229.25	60+16.3	*20-Sep-00*	Miller	
25	682.00	64+69.0	*25-Sep-00*	Miller		71	217.33	60+04.3	*20-Sep-00*	Miller	
26	670.92	64+57.9	15-Aug-00	Brico		72	205.33	59+92.3	*20-Sep-00*	Miller	
27	657.83	64+44.8	15-Aug-00	Brico		73	193.17	59+80.2	24-Aug-00	Miller	#
28	645.83	64+32.8	*25-Sep-00*	Miller		74	181.00	59+68.0	24-Aug-00	Miller	
29	642.17	64+29.2	17-Aug-00	Brico		75	169.08	59+56.1	24-Aug-00	Brico	
30	630.08	64+17.1	*25-Sep-00*	Miller		76	156.00	59+43.0	24-Aug-00	Brico	
31	618.00	64+05.0	25-Sep-00	Miller		77	144.00	59+31.0	24-Aug-00	Brico	
32	606.75	63+93.8	*25-Sep-00*	Miller		78	132.00	59+19.0	28-Aug-00	Brico	
33	601.25	63+88.3	*25-Sep-00*	Miller		79	129.00	59+16.0	23-Aug-00	Brico	
34	592.17	63+79.2	*25-Sep-00*	Miller		80	108.67	58+95.7	23-Aug-00	Brico	
35	587.67	63+74.7	*25-Sep-00*	Miller		81	96.58	58+83.6	23-Aug-00	Brico	
36	575.67	63+62.7	*25-Sep-00*	Miller		82	84.50	58+71.5	*20-Sep-00*	Miller	
37	563.67	63+50.7	*25-Sep-00*	Miller		83	72.42	58+59.4	23-Aug-00	Brico	
38	551.67	63+38.7	*25-Sep-00*	Miller		84	60.50	58+47.5	23-Aug-00	Brico	
39	539.50	63+26.5	25-Sep-00	Miller		85	48.33	58+35.3	23-Aug-00	Brico	
40	535.83	63+22.8	25-Sep-00	Miller		86	36.17	58+23.2	20-Sep-00	Miller	
41	532.00	63+19.0	15-Aug-00	Brico		87	24.33	58+11.3	23-Aug-00	Brico	
42	528.42	63+15.4	15-Aug-00	Brico		88	12.17	57+99.2	23-Aug-00	Brico	#
43	523.75	63+10.8	15-Aug-00	Brico		89	0.00	57+87.0	20-Sep-00	Miller	
44	511.67	62+98.7	18-Sep-00	Miller		90					
45	499.67	62+86.7	18-Sep-00	Miller		**92**	**TOTAL JOINTS**		6.67%		
46	490.50	62+77.5	18-Sep-00	Miller		**87**	**JOINTS INSTALLED**				

6736-7640

MWRA Project # 6280 25-Jan-01
60" Joint Seal Location DATE = Seal Physically Tested C. R. H.
WASM 2 - Section 5 *DATE* = Seal Included in Batch/ Not tested
As Measured From Station 67+53

Joint #	Distance (ft.)	Pipe Station	Date Tested	Comments		Joint #	Distance (ft.)	Pipe Station	Date Tested	Comments	
0	0.00	67+53.3				41	425.00	71+78.3	10-Aug-00	Brico	#
1	7.50	67+60.8	24-Aug-00	Miller	#	42	437.10	71+90.4			#
2	12.00	67+65.3	22-Sep-00	Miller	#	43	449.30	72+02.6	10-Aug-00	Brico	#
3	24.00	67+77.3	22-Sep-00	Miller	#	44	461.40	72+14.7	10-Aug-00	Brico	
4	36.20	67+89.5	23-Aug-00	Miller		45	473.60	72+26.9	10-Aug-00	Brico	
5	40.10	67+93.4	3-Aug-00	Brico	#	46	485.80	72+39.1	25-Sep-00	Miller	
6	44.20	67+97.5	3-Aug-00	Brico	#	47	497.90	72+51.2	25-Sep-00	Miller	
7	56.10	68+09.4	3-Aug-00	Brico		48	510.00	72+63.3	25-Sep-00	Miller	
8	68.20	68+21.5	*26-Sep-00*		#	49	522.10	72+75.4	25-Sep-00	Miller	#
9	80.30	68+33.6	3-Aug-00	Brico	#	50	534.20	72+87.5	10-Aug-00	Brico	
10	92.60	68+45.9	3-Aug-00	Brico	#	51	546.30	72+99.6	10-Aug-00	Brico	
11	104.50	68+57.8	22-Sep-00	Miller		52	558.40	73+11.7	25-Sep-00	Miller	#
12	116.70	68+70.0	3-Aug-00	Brico	#	53	570.40	73+23.7	25-Sep-00	Miller	
13	128.80	68+82.1	3-Aug-00	Brico	#	54	582.60	73+35.9	10-Aug-00	Brico	
14	133.00	68+86.3	25-Sep-00	Miller	#	55	594.50	73+47.8	11-Aug-00	Brico	
15	145.00	68+98.3	25-Sep-00	Miller		56	606.60	73+59.9	11-Aug-00	Brico	#
16	157.20	69+10.5	3-Aug-00	Brico		57	618.70	73+72.0	25-Sep-00	Miller	#
17	169.40	69+22.7	3-Aug-00	Brico		58	630.80	73+84.1	25-Sep-00	Miller	#
18	181.40	69+34.7	3-Aug-00	Brico		59	642.70	73+96.0	25-Sep-00	Miller	#
19	189.90	69+43.2	3-Aug-00	Brico		60	655.00	74+08.3	10-Aug-00	Brico	
20	193.50	69+46.8	3-Aug-00	Brico		61	667.00	74+20.3	25-Sep-00	Miller	#
21	199.90	69+53.2	3-Aug-00	Brico	#	62	679.10	74+32.4	11-Aug-00	Brico	
22	203.00	69+56.3	***20-Oct-00***	***Miller***		63	691.10	74+44.4	10-Aug-00	Brico	
23	215.30	69+68.6	3-Aug-00	Brico		64	703.30	74+56.6	10-Aug-00	Brico	
24	227.30	69+80.6				65	715.40	74+68.7	25-Sep-00	Miller / MH	
25	239.60	69+92.9	3-Aug-00	Brico	#	66	720.90	74+74.2	25-Sep-00	Miller / MH	#
26	251.40	70+04.7	3-Aug-00	Brico		67	732.20	74+85.5	10-Aug-00	Brico	
27	263.50	70+16.8				68	744.20	74+97.5	25-Sep-00	Miller	#
28	275.70	70+29.0	3-Aug-00	Brico		69	756.40	75+09.7	10-Aug-00	Brico	
29	279.80	70+33.1	3-Aug-00	Brico		70	768.50	75+21.8	25-Sep-00	Miller	#
30	291.80	70+45.1	3-Aug-00	Brico		71	780.00	75+33.3	10-Aug-00	Brico	
31	304.00	70+57.3	3-Aug-00	Brico		72	792.20	75+45.5	11-Aug-00	Brico	
32	316.20	70+69.5	26-Jul-00	Brico		73	804.40	75+57.7	25-Sep-00	Miller	#
33	328.30	70+81.6	10-Aug-00	Brico	#	74	816.50	75+69.8	11-Aug-00	Brico	
34	340.40	70+93.7	26-Jul-00	Brico		75	828.60	75+81.9	11-Aug-00	Brico	
35	352.60	71+05.9	26-Jul-00	Brico		76	840.70	75+94.0	10-Aug-00	Brico	
36	364.60	71+17.9	26-Jul-00	Brico	#	77	852.90	76+06.2	10-Aug-00	Brico	
37	376.60	71+29.9	3-Aug-00	Brico	#	78	865.00	76+18.3	10-Aug-00	Brico	
38	388.70	71+42.0	31-Jul-00	Brico	#	79	871.80	76+25.1	10-Aug-00	Brico	#
39	400.80	71+54.1	26-Jul-00	Brico		80	880.00	76+33.3		sleeve-xwide	
40	413.00	71+66.3	25-Jul-00	Brico		81					

END

82 TOTAL JOINTS 40.00%
76 JOINTS INSTALLED

Exhibit L

CDM Camp Dresser & McKee

RESIDENT ENGINEER'S DAILY REPORT

PROJECT:	**MWRA Contract No. 6280** **Weston Aqueduct Supply Mains 1 & 2, Sections 2, 3, 4, 5, & 6**
CONTRACTOR:	**Spiniello Companies** **35 Airport Rd., Morristown, NJ 07962-1968**
LOCATION:	**Newton, Massachusetts**

DATE: 8-23-00 **WEATHER:** Overcast **TEMP:** 60° AM - 70° noon - 72° PM

WORK OF GENERAL CONTRACTOR

WASM 2, Section 5:
Station 55+78:

- Removed the frame and cover from the air valve manhole.
- Removed the blind flange and began dewatering the pipe for access to Station 54+40 (contract limits).

Station 57+23 (Robinhood Rd.) to Station 63+13:

- Worked on installing internal joint seals.

Station 124+00 (Bristol St.) back to Station 117+00 (Dartmouth St.):
Cement-mortar lined 700 lf of 60" CI pipe with a ½" troweled pass:

08:15 AM	Start lining run at Station 124+00 (+/-).
09:45 AM	One set of three, 2" x 2" cubes, cement-mortar samples taken and stored Sta. 121+50 +/-
12:15 PM	One set of three, 2" x 2" cubes, cement-mortar samples taken and stored Sta. 117+75 +/-
01:45 PM	End lining run at Station 117+00.

Station 141+00 (Risley Rd.) to Station 9+60 (Section 6, Valentine St.):

- Worked on cleaning the pipe for cement mortar lining.

WASM 2, Section 6:
Station 18+30 (Beaumont St.) to Station 29+15 (Bullough Pond):

- Worked on cleaning the CI joints. Completed run.
- Worked on grinding the joint –mating surface for the internal joint seals. Completed run.

WORK OF SUBCONTRACTORS

- ODF: On site to provide and install the internal joint seals.
  Equipment: 1 – pickup truck Manpower: 4

SPECIAL NOTES

- An internal inspection was conducted today from Station 141+00 to Station 9+60. The pipe appeared in satisfactory condition and both runs of pipe were approved for cement-mortar lining.
- Andy Thoemke (Brico) on site to advise on the installation procedures of the internal joint seals.
- Paul Hayward of Jason Consultants Ltd. Was on site today to advise Spiniello Co. on internal joint seal installation procedures. See attachment.
- Bob DePonte on site to view the joint seal installation progress.

CONTRACTOR'S MANPOWER & EQUIPMENT

Manpower: 32
Equipment: 2 – F700 winch trucks, 1 – Lull 644D-34 forklift, 2 – IR 125KVA generators,
3 – fans, 1 – JD 410E backhoe/ loader, 1 – F600 dump truck,
3 – IR 185 air compressors, 1 – IR 50KW generator, 1 – lining machine,
1 – feeder machine, 1 – buggy, 1 – trailer mounted cement mixer.

POLICE DETAILS

Manpower: none

SUBMITTED BY

Christopher R. Houde

Christopher R. Houde
for
James M. Glendye Sr.

Memorandum

To: James M. Glendye, Sr.
From: Christopher R. Houde
Date: August 23, 2000
Subject: MWRA Contract #6280
Re: Supplement to Daily Report

Wednesday, August 23, 2000

Paul Hayward of Jason Consultants Ltd. Was on site today to advise Spiniello Co. on internal joint seals procedures. The following is a list of highlights of the day's activities:

On site:

Paul Hayward	Jason Consultants Ltd.
Bob DePonte	Spiniello
Steve Pollen	Spiniello
John Walsh	Spiniello
Andy Thoemke	Brico
Chris Houde	CDM

All parties proceeded to the Brico joint seal storage area. A seal was removed from its packaging and inspected by Mr. Hayward. Employees of Spiniello and ODF demonstrated how the retaining bands fit onto the joint seal. Mr. Hayward was concerned with the configuration of the ridges on the back of the joint seal where the retaining band's outward force is transmitted through the seal. At the outside of the channel that the band fits into, there are two ridges. At the inside of the channel, there are four ridges. Mr. Hayward also noted that the channel is 3 ½ " wide and that the band is only 2 5/8" wide.

Mr. Hayward then theorized on the practice of installing the internal joint seals on the cast iron pipe. He suggested that the pipe be cement-mortar over the CI joins, and the joint seals installed be installed on the cement-mortar lining. C. Houde noted that the joint seals must be installed on the pipe wall and not on any porous material. After some discussion, Mr. Hayward suggested that an epoxy coating be put on the cement-mortar lining prior to installing the joint seal. C. Houde noted that a porous material would still exist between the pipe wall and the joint seal, thus creating an exfiltration path.

All parties then proceeded to view the pipe surface preparation and joint seal installation in the WASM 2, Section 5 from Station 57+87 to 63+13. Mr. Hayward commented that in the U.K. they would never try to seal against such a rough surface. He suggested applying a skim coat of epoxy to the joint surface. According to Mr. Hayward, the process should take about 10 minutes per joint. C. Houde and A. Thoemke noted that two previous contracts had successfully installed the Brico product against the same pipe surface without the need for epoxy. It was further stated that the surface of the pipe does not seem to be the main problem. The main problems seem to be associated with the beveled ends of the CI bell and spigots and the leaks at the wedge area of the joint seals. A. Thoemke stated that a shipment of 14" and 16" wide seals were due to be shipped on August 24 in hoped to overcome the problems with the beveled joints.

All Parties then examined a Miller seal. Four Miller seals had been delivered to the site. The Miller seal is the same 12" wide standard seal as the Brico, but the Miller seal was supplied with a two-piece band. The Miller retaining bands are solid stock 2" wide. Additionally, the wedges are shaped to fit the curve of the pipe. It was decided that the four Miller seals be installed at locations where the Brico seals had failed.

To: James M. Glendye, Sr.
From: Christopher R. Houde
Date: August 23, 2000
Subject: MWRA Contract #6280
Re: Supplement to Daily Report

Wednesday, August 23, 2000

The joints #3 and #4 in the run from Station 67+36 to Station 76+40 were selected as test cases for the Miller seals. While cleaning the joint surface of joint #3, a 2" x 1 ½" x 7/32" deep chunk of pipe was removed. The divot will have to either be spanned by a larger seal, or filled with epoxy. Joint #1 in the same run of pipe will be used as the second test installation.

Joint #4:
Brico:
The West band on the Brico seal was expanded to 4000 psi and a #5 wedge was installed.
The East band on the Brico seal was expanded to 4500 psi and a #5 wedge was installed.
During testing, the seal leaked from the West band at both the top and bottom of the seal.

Miller:
The West band on the Miller seal was expanded to 4200 psi and a wedge was installed.
The East band on the Miller seal was expanded to 4000 psi and a wedge was installed.
The seal was pressurized to 5 psi. The edges and the body of the seal were sprayed with a soap and water mixture.
There were no visible leaks and the test pressure of 5 psi held by the seal.

Joint #1:
Miller:
The hydraulic jack was not functioning correctly, and the seal installation was postponed until 8/24/00

END